

L86 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2001:179969 CAPLUS
 DN 134:195298
 ED Entered STN: 16 Mar 2001
 TI Manufacture of nanometer calcium carbonate by ultrasonic cavitation
 IN Li, Genfu; Xie, Yongsheng; Zhang, Zuyuan
 PA Peop. Rep. China
 SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
 CODEN: CNXXEV
 DT Patent
 LA Chinese
 IC ICM C01F011-18
 ICS B01J019-10
 CC 49-5 (Industrial Inorganic Chemicals)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1262223 ✓	A	20000809	CN 1999-127024	19991229 <--
PRAI	CN 1999-127024		19991229		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
CN 1262223	ICM	C01F011-18
	ICS	B01J019-10

AB The manufacturing process comprises calcining limestone to obtain CaO and CO₂, hydrating CaO to obtain Ca(OH)₂ emulsion, aerating CO₂, adding an additive, and coating, and drying. The process is characterized in using ultrasonic cavitation during hydration, carbonization, and coating. The product has uniform particle distribution and particle size of 20-100 nm.

ST calcium carbonate manuf limestone ultrasonic cavitation

IT Carbonization

Cavitation

Hydration, chemical

Sound and Ultrasound

(in manufacture of nanometer calcium carbonate by ultrasonic cavitation)

IT Limestone, processes

RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(in manufacture of nanometer calcium carbonate by ultrasonic cavitation)

IT 124-38-9, Carbon dioxide, uses 1305-78-8, Calcium oxide, uses

RL: MOA (Modifier or additive use); USES (Uses)

(in manufacture of nanometer calcium carbonate by ultrasonic cavitation)

IT 471-34-1P, Calcium carbonate, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)

(manufacture of nanometer calcium carbonate by ultrasonic cavitation)

RN 124-38-9

RN 1305-78-8

RN 471-34-1P

L86 ANSWER 2 OF 2 WPIX COPYRIGHT 2005 THE THOMSON CORP on STN

AN 2000-639083 [62] WPIX

DNC C2000-192344

TI Process for preparing nm-class calcium carbonate by ultrasonic cavitation technique.

DC E33 G01

IN LI, G; XIE, Y; ZHANG, Z

PA (LIGG-I) LI G

CYC 1

PI CN 1262223 A 20000809 (200062)* C01F011-18 <--

ADT CN 1262223 A CN 1999-127024 19991229

PRAI CN 1999-127024 19991229

IC ICM C01F011-18

ICS B01J019-10

AB CN 1262223 A UPAB: 20001130

NOVELTY - A process for preparing nm-class active calcium carbonate by ultrasonic cavitation technique includes such steps as calcining lime stone in vertical kiln to obtain CaO and CO₂ gas, hydrating CaO to obtain Ca(OH)₂ emulsion while cavitating, fining while cavitating, carbonizing with said CO₂ gas while cavitating to obtain superfine CaCO₃ grout, surface activating while cavitating, and spray drying. Its advantages are 20-100 nm of granularity, uniform granularity distribution, and large-scale production.

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FS CPI

FA AB

MC CPI: E34-D03; G01-A01

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